

Application Serial No. 09/759,314
Amendment dated October 4, 2004
Reply to Office Actions dated September 11, 2003 and September 22, 2004

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 and 2 (canceled)

Claim 3 (currently amended): ~~Structural component according to claim 1, characterized in that A structural component for a device for the treatment of glass melts, comprising:~~
~~a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;~~
~~the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;~~
~~the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;~~
~~wherein the plastic material is halogen-containing[[;]].~~

Claim 4 (currently amended): ~~Structural component according to claim 1, characterized in that A structural component for a device for the treatment of glass melts, comprising:~~
~~a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;~~
~~the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;~~
~~the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;~~
~~wherein the coating thickness is less than 1 mm.~~

Claim 5 (currently amended): Structural component according to claim 4, characterized in that the coating thickness lies between 20 μ and 250 μ , preferably between 40 and 200 μ .

Claim 6 (currently amended): ~~Structural component according to claim 1, characterized in that it~~ A structural component for a device for the treatment of glass melts, comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;

wherein the base body consists essentially of copper, platinum, steel, or of alloys of these metals.

Claim 7 (currently amended): ~~Structural component according to claim 1, characterized in that it~~ A structural component for a device for the treatment of glass melts, comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;

wherein the structural component is an agitator for the homogenization of glass melts.

Claim 8 (currently amended): ~~Structural component according to claim 1, characterized in that it~~ A structural component for a device for the treatment of glass melts, comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;

wherein the structural component is a duct for the introduction of gases into the glass melt.

Claim 9 (currently amended): Structural component according to claim 1, characterized in that it A structural component for a device for the treatment of glass melts, comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of a glass melt that directly surrounds the structural component in use lies below the melt temperature of the coating of plastic material;

wherein the structural component is an electrode holder.

Claims 10 and 11 (cancelled)

Claim 12 (currently amended): Structural component according to claim 3, characterized in that wherein the coating thickness is less than 1 mm.

Claim 13 (cancelled)

Claim 14 (currently amended): Structural component according to claim 3, characterized in that wherein the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 15 (currently amended): Structural component according to claim 4, characterized in that wherein the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 16 (currently amended): Structural component according to claim 5, ~~characterized in that wherein~~ the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 17 (canceled)

Claim 18 (currently amended): Structural component according to claim 3, ~~characterized in that wherein the structural component~~ it is an agitator for the homogenization of glass melts.

Claim 19 (currently amended): Structural component according to claim 4, ~~characterized in that it wherein the structural component~~ is an agitator for the homogenization of glass melts.

Claim 20 (currently amended): Structural component according to claim 5, ~~characterized in that it wherein the structural component~~ is an agitator for the homogenization of glass melts.

Claim 21 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material.

Claim 22 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the plastic material is halogen-containing.

Claim 23 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the coating thickness is less than 1 mm.

Claim 24 (new): Structural component according to claim 23, characterized in that the coating thickness lies between 20 μ and 250 μ .

Claim 25 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the base body consists essentially of copper, platinum, steel, or of alloys of these metals.

Claim 26 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the structural component is an agitator for the homogenization of glass melts.

Claim 27 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the structural component is a duct for the introduction of gases into the glass melt.

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Claim 28 (new): A structural component for a device for the treatment of glass melts, said structural component being disposed in a glass melt or in a gas space directly above a glass melt, said structural component comprising:

a base body of metal or a metal alloy with a cooling system in which a cooling medium is led through for the leading-off of heat through the structural component;

the base body being provided with a coating of plastic material the melt temperature of which lies below the melt temperature of the glass melt;

the cooling system being designed and arranged in such a manner that the temperature of the boundary layer of the glass melt that directly surrounds the structural component lies below the melt temperature of the coating of plastic material;

wherein the structural component is an electrode holder.

Claim 29 (new): Structural component according to claim 22, wherein the coating thickness is less than 1 mm.

Claim 30 (new): Structural component according to claim 22, wherein the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 31 (new): Structural component according to claim 23, wherein the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 32 (new): Structural component according to claim 24, wherein the base body consists essentially of copper, platinum, steel or aluminum, or of alloys of these metals.

Claim 33 (new): Structural component according to claim 22, wherein the structural component it is an agitator for the homogenization of the glass melt.

Claim 34 (new): Structural component according to claim 23, wherein the structural component is an agitator for the homogenization of the glass melt.

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Claim 35 (new): Structural component according to claim 24, wherein the structural component is an agitator for the homogenization of the glass melt.